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1.0 INTRODUCTION

1.1 PURPOSE

The purpose of this continued Airworthiness Maintenance Plan is to provide the line maintenance Technician with the information necessary to ensure the continued airworthiness of the Chelton Flight Systems, Flight Logic Synthetic Vision EFIS, flight and navigation instrumentation system as installed under STC SA02203AK.

This plan is designed to comply with FAA regulatory requirements for Instructions For Continued Airworthiness.

NOTE

This plan must be placed into the aircraft operator's Aircraft Maintenance Manual and Incorporated into the operator's scheduled maintenance program.

1.2 EFFECTIVITY

This continued Airworthiness plan is effective for all aircraft, incorporated with the Chelton Flight Systems, Flight Logic Synthetic Vision EFIS, flight and navigation instrumentation system as noted in above STC.

1.3 REFERENCE DOCUMENTS

This document forms a part of overall aircraft continued airworthiness requirements and is to be used in conjunction with following documents as applicable. For the latest revision of the following document, see Chelton Flight Systems at www.cheltonflightsystems.com

DOCUMENT NUMBER	TITLE
100-045242	EFIS-II Cabling and Termination Process
150-045010	Instrument Panel Layout
150-045011	IDU INSTL
150-045012	Circuit Breaker Layout
150-045050	GPS Antenna INSTL
150-045051	Remote Sensor INSTL
150-045261	Instructions for Continued Airworthiness
150-045262	Airplane Flight Manual Supplement
702-045250	W/D EFIS IDU Interface
702-045251	W/D Aircraft Systems Interface
150-045264	Chelton Flt System Installation Guide
7410-0001-01	Crossbow AHRS500GA User's Manual
84143-01	Free Flight GPS Equipment Installation Manual
IM2820-A1S8	Shadin Fuel/Airdata Computer Installation Manual
150-0452404	Chelton EFIS II Pilot's Guide and Reference
24-32-12	Securaplane XL2410-01 Dedicated Battery CMM
PS-12180	PS-12180 Technical Handbook

NOTE: It is the responsibility of the Maintenance Technician to verify with the Vendor that the Equipment Manual being used is the latest revision.

1.4 APPLICABLE FAR

FAR Part 21.50 “Instructions for continued airworthiness and manufacturer’s maintenance manuals having airworthiness limitations sections.”

1.5 GENERAL

Maintenance technicians should thoroughly familiarize themselves with Chelton Flight Systems, Flight Logic Synthetic Vision EFIS installation, wiring interface, and system operation, prior to attempting to maintain or troubleshoot this system.

1.5.1 GENERAL WIRING INSTRUCTIONS

1.5.2 Wire Separation

Whenever it becomes necessary to repair or replace a wire or group of wires, maintain the same wire separation that was used to install the system. Any wire added to or removed from the aircraft should satisfy separation requirements and wiring standards. (Ref; AC43.13-1B)

1.5.3 Wire Routing

Whenever it becomes necessary to repair or replace a wire or group of wires, maintain the same wire routing that was used to install the system. Wires should be routed using proper bend radius, drip loops, slack and to allow for easy access for maintenance repairs and inspection. Route wires in such a manner that it does not violate any regulatory safety requirements. (Ref; AC43.13-1B)

1.5.4 Securing Wire Bundles

Whenever it becomes necessary to repair or replace a wire or group of wires, clamps of the proper size, type, and material should be used. Secure repaired or replaced wiring in the same manner that it was installed in the aircraft. (Ref; AC43.13-1B)

1.5.5 Wire Termination

Whenever it becomes necessary to terminate wires, care should be taken to ensure enough slack in wiring for proper servicing, repair, and fit. When stripping wires for termination, be sure not to nick or cut strands of wire. Check that proper crimping tools are used, and that they are set to the proper setting for a correct crimp. When crimping terminals and/or splices use correct size for the wire gauge. If soldering is necessary be sure a cold solder joint does not exist, and that shrink tube of the proper size is installed over the wire and connection point. (Ref; AC43.13-1B)

NOTE: It is expected that the skilled technicians performing the inspections, test, and troubleshooting of the Chelton Flight Systems, Flight Logic Synthetic Vision EFIS system, will adhere to the safety practices and operational procedures given in the basic aircraft manufacturers Maintenance Manuals.
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2.0 SYSTEM DESCRIPTION

2.1 FUNCTIONAL OVERVIEW

The Chelton Flight Systems, Flight Logic Synthetic Vision EFIS system is a complete flight and navigation instrumentation system that intuitively provides information to a pilot via computer generated screen displays. The screen displays are a three-dimensional, enhanced vision Primary Flight Display (“PFD”) and a Multi-Function Display (“MFD”) that can be configured to show a moving map, an HSI, traffic, terrain or weather displays. The Flight Logic Synthetic Vision EFIS System consists of various discrete digital sensor modules that communicate with the IDUs via RS-232, RS-422 or ARINC-429 serial data. The Flight Logic Synthetic Vision EFIS (IFR) System will have one or two sets of digital sensor modules (Installation dependant) communicating with up to four IDU’s, (Also Installation dependant). Each IDU incorporates a high-brightness AMLCD screen, an 8 key keyboard, a screen and keyboard lighting intensity control, a rotary selector and enter switch, a central processing unit, 16 RS-232 receive ports, 9 RS-232 transmit ports, 4 RS-422 receive ports, 4 RS-422 transmit ports, 8 ARINC-429 receive ports, 4 ARINC-429 transmit ports and 10 discreet I/O ports. Data storage consists of up to 2 ATA standard flash-drives sufficiently sized to hold needed regional databases. Because the receive ports of the IDU’s are connected to the digital sensor modules in parallel, each IDU is independent from all other IDU’s. In an IFR (2, 3, 4 IDU) installation, the software of the primary IDU will be configured so that only the PFD screen can be displayed. The software of all other IDU’s will be configured so that any screen display can be shown at any time.

Note: At a minimum, an Flight Logic Synthetic Vision EFIS System installed in a VFR aircraft would include at least one IDU, a TSO-C145 GPS receiver, a TSO-C4c and C6d approved AHRS, and a TSO-C106 approved Air Data Computer (“ADC”).

The Flight Logic Synthetic Vision EFIS IDU system also provides an integrated visual and auditory caution / warning / advisory systems that monitors a wide variety of parameters (essential, non-essential, advisory) and provides annunciations for conditions that demand pilot attention. Aural annunciations take the form of either a voice warning or a high / low-tone warble. Aural warnings are accompanied by a red flag and repeat until acknowledged by the pilot or the condition is corrected. Aural cautions are accompanied by an amber flag and are only annunciated once. Advisories may be accompanied by an amber or green flag, depending on condition, and are indicated by either a voice annunciation or warble. These system capabilities reduce pilot workload significantly by automatically monitoring installed systems and allowing the pilots attention to be on flying the aircraft.

2.2 FLIGHT LOGIC SYNTHETIC VISION EFIS IDU

The Chelton Flight Systems Flight Logic Synthetic Vision EFIS IDU provides information to a pilot via computer-generated pages shown on panel-mounted hardware. The panel-mounted hardware consists of one or more (Installation dependent) Integrated Display Units (IDU) that can be configured as Primary Flight Displays (PFD) or Multifunctional Displays (MFD).



PFD



MFD

The IDU consists of a high-brightness backlit LCD Screen, eight buttons, two control knobs, and an optional slip indicator which are also backlit and their brightness can be adjusted independently of the screen.

The system is designed to be fully compatible with normal operations of commercial aircraft: unwanted alerts will be very rare if the flight crew maintains situational awareness with respect to the terrain.

The functional areas are:

- Attitude Awareness Callouts
- Excessive Bank Angle Alert
- Enhanced features, Terrain and Obstacle Awareness alerts and warnings as well as optional display of this information, and Terrain Clearance Floor

In addition to the main alerting functions, the computer also performs the following auxiliary functions:

- Input signal processing (including filtering and signal monitoring).
- Alert output processing (including alert prioritization, voice message synthesis, audio output and display and warning lamp drivers)
- Built In Test and monitoring including cockpit-activated self-test.
- Smart Media Cards interface for uploading software and databases.
- Test connector for system checkout and troubleshooting.

2.3 REMOTE SENSORS

- A. The **Crossbow Technologies** Attitude And Heading Reference (AHRS) sensor supports the Attitude and Heading functions within the system. Each AHRS is a self contained LRU whose functions / software are fully compliant with applicable TSO.

The AHRS500GA- provides an accurate attitude and heading reference in DO-160D avionic dynamic environments including altitude, temperature, shock, and vibration. The AHRS500GA- supports the Chelton Flight Systems Flight Logic Synthetic Vision EFIS primary flight display (PFD) with aircraft heading and attitude data, derived from inertial instrument and magnetic instrument data. The AHRS500GA is compliant with all applicable TSO's. The AHRS500GA supports RS-232 and RS-422 interfaces.

- The AHRS500GA is a six Degree-of-Freedom (DOF) strap down inertial measurement and attitude reference system that employs three solid-state angular-rate sensors, three solid-state accelerometers, three fluxgate magnetometers and high speed digital microprocessor based electronics. The AHRS500GA is a self-contained unit in a single all-metal housing. It is sealed to keep out moisture and operate through altitude and temperature range. The all-metal housing and connector system are designed to provide EMI protection.
- The AHRS500GA-is a dedicated piece of equipment and only outputs data for use by other controlling systems.

The AHRS500GA provides an accurate inertial reference in DO-160D avionic dynamic environments including altitude, temperature, shock, and vibration.

- B. The **FreeFlight Systems** Wide Area Augmentation System Global Positioning Sensor (WAAS-GPS) supports the Navigation functions within the system. Each GPS is a self contained LRU

The GWSS is a GPS/WAAS Sensor System, which provides position, velocity and integrity data to Flight Logic Synthetic Vision EFIS System (NMS). The GWSS navigates worldwide by processing Global Positioning System (GPS) and Wide Area Augmentation System (WAAS) signal data to compute aircraft position and velocity and position solution integrity estimates. The system interfaces to the Flight Logic Synthetic Vision EFIS system (NMS) via an RS-232 serial interface. The system consists of two Line Replaceable Units (LRUs): a Sensor/Processor Unit (SPU) and a GPS antenna unit.

The GWSS is an update to Free Flight's previously approved 12-channel GPS sensor card (the GS12). The GS12 performs the GPS navigation and integrity functions for the EFIS II System.

- C. The ***Shadin Air Data Computer*** supports the Air Data functions within the system. Each ADC is a self contained LRU which is capable of operation up to 55,000 feet, with an operating temperature of -20 +55°C. The unit is compliant with all applicable TSO's and compliant with Environmental qualification to DO-160B. The ADC provides outputs of IAS, TAS, Mach, P.ALT, Baro Corrected ALT, D. ALT, OAT, TAT, Wind Aloft, Fuel Flow, L Fuel Used, R Fuel Used, and Altitude Blind Encoder output
- D. The optional ***Analog Interface Unit*** is an analog to digital converter that converts on board navigational equipment outputs and discrete signals to digital form for use by the Flight Logic Synthetic Vision EFIS system. These signals include VOR/LOC, Glide Slope, Flap Position, Flight Director, Auto Pilot, ADF, Marker Beacon and Radar Altimeter.
- E. The optional ***Securaplane XL2410 Dedicated Battery*** provides emergency backup 24 VDC power to the EFIS System. It consists of two 13 Ah Hawker Genesis lead acid batteries with a charge control and protection circuitry located in the assembly. The batteries are configured in a series combination to yield a 24 VDC, 13 Ah battery. If the aircraft bus drops below 25-26 VDC, the battery automatically supplies the output load.
- F. The optional ***Power Sonic PS-12180 Dedicated Battery*** provides emergency backup 12 VDC power to the EFIS System. It is a completely sealed lead acid battery with dilute sulphuric acid electrolyte that is suspended and thus immobilized. The battery is leak proof and maintenance free. In the event of an aircraft power failure, the battery automatically supplies 12VDC to the Flight Logic Synthetic Vision EFIS System.

A complete description of the functions of the EFIS is contained in the Chelton EFIS II Pilot's Guide and Reference Doc. No. 150-045240.

The EFIS II System as installed under this STC provides the following functions:

- Attitude / Heading
- Air Data Computer
- Traffic "See and Avoid"
- Flight Guidance System (Lateral / Vertical)
- Flight Management System (FMS)
- Fault Warnings (Aural / Visual)
- Terrain Awareness and Warning System
- Lightning Detection

3.0 CONTROL AND OPERATION INFORMATION

Chelton Flight Systems Flight Logic Synthetic Vision EFIS system Control /Operation is contained in the Chelton Flight Logic Synthetic Vision EFIS Pilot's Guide and Reference Doc. No. 150-045240 and installation information is contained in the Flight Logic Synthetic Vision EFIS Installation Guide Doc. No. 150-045264.

4.0 SERVICING INFORMATION

A. EFIS IDU

The LCD screen is easily damaged. Avoid rubbing with a hard or sharp object. Wipe water off immediately as long contact may cause discoloration or spots. Clean a soiled screen with an absorbent soft cotton cloth.

B. 28 VDC Dedicated battery (Optional)

The XL2410 batteries are sealed lead acid and do not require any servicing. Replace the sealed lead acid batteries in the Securaplane XL2410 Battery Unit in the 48th month after installation. (Reference: Securaplane CMM 24-32-12)

C. 12 VDC Dedicated battery (Optional)

Inspect for evidence of physical damage, loose connections, and electrolyte loss during pre-flight and post-flight inspections. Perform a battery test annually by placing the fully charged battery under a 9 amp load for one hour. The voltage after one hour should be no less than 10.5 VDC. Replace the battery prior to the 36th month after installation.

5.0 MAINTENANCE INSTRUCTIONS

A. Data Base Updates:

Navigation and Obstruction Data Bases:

- (1) The customer will receive a SmartMedia card with the latest Nav and alternately Nav and Obst data base updates approximately every three weeks via mail. The customer will update the system by installing the SmartMedia card in each IDU and performing the update procedure outlined in the Ground Maintenance Functions section in Chapter 4 of the Chelton Flight Systems Flight Logic Synthetic Vision EFIS Installation Guide, document number 150-045264.
- (2) The customer can access the Chelton Flight Systems internet site, www.cheltonflightsystems.com, and download an authorized version of the data base(s). The customer will copy the data base(s) to a SmartMedia card and update each IDU by performing the update procedures outlined in the Ground Maintenance Functions.

Terrain Data Base:

Update of the Terrain data base is performed by an authorized Chelton Flight Systems dealer as needed. Chelton Flight Systems will provide announcements to its authorized dealers when updates to the Terrain data base are available.

- (1) An authorized Chelton Flight Systems dealer will remove each IDU from its rack.
- (2) The flash card access cover located on top of the IDU will be removed to access the flash card.
- (3) The mechanic will press the extraction button to eject the flash card from the IDU.
- (4) The flash card will either be replaced with another flash card with an updated data base, or the mechanic will install the flash card in a suitable computer and copy the data from a CD-ROM supplied by Chelton Flight Systems.

- (5) After updating the flash card, the card is removed from the computer and installed in the IDU.
- (6) The cover access cover is replaced on the IDU and the IDU is installed in the rack.

Verification of the data bases will be performed during initial boot sequence with a screen displaying the expiration dates of all databases.

- B. The Securaplane XL2410 Dedicated Battery must have an “On Aircraft Energy Level Test” as specified in paragraph 5.1.6 performed at least once every 6 months. If in storage, recharge every 6 months. Reference to the “Maintenance Practices” section of the Securaplane Battery CMM, 24-32-12, Rev B or later revision for testing, replacement and storage procedures.
- C. Structural Inspections: No inspections required
- D. It is the Owner’s/Operator’s responsibility to ensure that after maintenance is performed on the system, a system checkout is performed to verify that the maintenance did not adversely affect the operation or intended functionality.

5.1. SYSTEM OPERATIONAL CHECKOUT AFTER MAINTENANCE

5.1.1. EFIS II IDU Maintenance

- a. Apply aircraft power
- b. Press the EFIS master Switch to ON
- c. As the system powers up, a warble tone should be heard.
- d. Press the mute switch and verify that the warble tone is muted.
- e. Observe that there are no warning flags displayed on the PFD and/or MFD
- f. Adjust the screen brightness by turning the left-hand control knob.
- g. Adjust the button and slip indicator brightness by simultaneously pushing and turning the left-hand control knob.
- h. Set the altitude bug on the MFD (BUGS menu) to the displayed altitude.
- i. Increase or decrease the altitude via the MFD control knob to more than 150 feet of the selected altitude.
- j. Listen for the “ALTITUDE, ALTITUDE” voice warning over the intercom.
- k. Press the EFIS Master Switch to OFF
- l. Remove power from the aircraft.

5.1.2. GPS Sensor Maintenance

- a. Pull the appropriate GPS circuit breaker.
- b. Apply aircraft power
- c. Press the EFIS master Switch to ON
- d. Listen for a ”GPS failure, GPS failure” voice warning heard on the aircraft intercom.
- e. Observe the “No GPS” amber warning flag on the MFD.
- f. Set the appropriate GPS circuit breaker.
- g. Observe that the “No GPS” warning flag disappears from the MFD.
- h. Press the EFIS Master Switch to OFF
- i. Remove power from the aircraft.

5.1.3. Analog Interface Unit (AIU) (Optional) Maintenance

- a. Apply aircraft power
- b. Press the EFIS master Switch to ON
- c. Perform a VOR/LOC system check using the aircraft Maintenance Manual.
- d. Perform a Radar Altimeter system check using the aircraft Maintenance Manual.
- e. Press the EFIS Master Switch to OFF
- f. Remove power from the aircraft.

5.1.4. Fuel/Airdata Computer (ADC) Maintenance

Perform the Leak, Altitude and Airspeed test in Section 5.0 of the Chelton Ground Functional Test, Doc. No.650-045255.

5.1.5. AHRS500GA Maintenance

- a. Place the aircraft on a Compass Rose.
- b. Perform a “Hard and Soft Iron Calibration” using the Chelton Compass Calibration Doc. No. 650-045258.

5.1.6. 28 VDC Dedicated Battery (Optional) Maintenance

- a. Apply aircraft power
 - b. Verify CB1 on the front of the battery unit is set.
 - c. Press the “LEVEL TEST” button on the front of the battery unit.
 - d. After 5 seconds one of the three LED’s will come on, indicating the energy remaining in the battery
 - Above 65% is indicated as FULL (green LED)
 - Between 50% and 65% is indicated MID (yellow LED)
 - At or below 50% is indicated as LOW (red LED)
- For Yellow or Red LED indication, charge battery for 2 hours and repeat test.
If same results, send to repair shop.

5.1.7. 12 VDC Dedicated Battery (Optional) Maintenance

- a. Do Not Apply aircraft power
- b. Place aircraft battery switch in OFF position
- c. Place EFIS BATTERY switch to ON
- d. Place EFIS 1 MASTER switch to ON
- e. Observe BATT ON (White) annunciator illuminates on instrument panel.
- f. Place EFIS BATTERY switch to OFF
- g. Observe BATT ON (White) annunciator extinguishes on instrument panel.

6.0 TROUBLESHOOTING INFORMATION

See troubleshooting appendix in the Chelton Flt System Flight Logic Synthetic Vision EFIS Installation Guide, 150-045264, Crossbow AHRS500GA-() Installation Manual, Doc.# 7410-0001-01, Free Flight GPS Equipment Installation Manual, Doc.# 84143-01, Shadin Fuel/Airdata Computer Installation Manual. Doc# IM2820, or Securaplane XL2410-01 Emergency Battery CMM, Doc.# 24-32-12.

For wiring diagram information refer to section 8.0 of this manual.

NOTE: It is the responsibility of the Maintenance Technician to verify with the Vendor that the Equipment Manual being used is the latest revision.

7.0 REMOVE AND REPLACEMENT INFORMATION

MANUFACTURER	P/N	DESCRIPTION
Chelton Avionics	401-045500-0101	IDU
Shadin	681201A-1	Temp Probe
Shadin	962830A-1-S-8	ADC Sensor
Freeflight	84100-01-02xx	GPS
Freeflight	81194	GPS Antenna
Crossbow	8350-0062-01	AHRS
Chelton Flight Systems	AIU-1	AIU (Optional)
Securaplane	100-2410-01	28 VDC Dedicated Battery (Optional)
Power Sonic	PS-12180	12 VDC Dedicated Battery (Optional)

Flight Logic Synthetic Vision EFIS IDU

To remove the IDU loosen the locking mechanism and pull the unit from the instrument panel. Install in reverse order. See paragraph 5.1.1 for checkout procedures.

GPS Sensor

To remove the GPS Sensor remove the electrical connector and the 4 mounting screws. Install in reverse order. See paragraph 5.1.2 for checkout procedures.

GPS Antenna

To remove the GPS Antenna remove the electrical connector and the 4 mounting screws. Install in reverse order. Apply a Fillet Seal around the base of the antenna using MIL-S-8802 sealant. See paragraph 5.1.2 for checkout procedures.

Analog Interface Unit (AIU) (Optional)

To remove the AIU remove the electrical connector and the 4 mounting screws. Install in reverse order. See paragraph 5.1.3 for checkout procedures.

Fuel/Airdata Computer (ADC)

To remove the ADC remove the electrical connector. Disconnect the Pitot and Static Lines, capping the exposed fittings. Remove the 4 mounting screws. Install in reverse order. See paragraph 5.1.4 for checkout procedures.

AHRS500GA

To remove the AHRS remove the electrical connector. Record or mark the placement of any washers or shims before removing the 4 mounting screws. Install the AHRS being careful to re-install the washers or shims in the same locations. Install the four mounting screws. Connect the electrical connector. See paragraph 5.1.5 for checkout procedures.

28 VDC Dedicated Battery (Optional)

To remove the 28 VDC Dedicated Battery pull CB1 on the front of the unit. Loosen the hold-down knobs on the front of the battery tray. Using the handle on the front of the battery, pull the battery straight out of the tray. Install in reverse order. See paragraph 5.1.6 for checkout procedures.

12 VDC Dedicated Battery (Optional)

To remove the 12 VDC Dedicated Battery, disconnect the power leads. Remove the 2 screws and washers securing the hold down strap. Lift the battery out of the positioning brackets. Install in reverse order. See paragraph 5.1.7 for checkout procedures.

NOTE: Prior to replacing the 12 VDC Dedicated Battery it must be fully charged in the following manner:

Cycle Application: Limit initial current to 3.6A. Charge until battery voltage (under charge) reaches 14.40 to 14.70 volts at 68 degrees F (20 degrees C). Hold at 14.40 to 14.70 volts until current drops to approximately 180mA. Battery is fully charged under these conditions, and charger should either be disconnected or switched to "float" voltage.

"Float" or "Stand-by" Service: Hold battery across a constant voltage source of 13.50 to 13.80 volts continuously. When held at this voltage, the battery will seek its' own current level and maintain itself in a fully charged condition.

Note: For previously installed emergency power systems refer to applicable ICAW.

8.0 WIRING DIAGRAMS

The Chelton Avionics wiring diagrams associated with this alteration are 702-045250 and 702-045251. These drawings are to be given to the customer for incorporation in the aircraft Wiring Diagrams Manual.

9.0 SPECIAL INSPECTION REQUIREMENTS

NONE

10.0 APPLICATION OF PROTECTIVE TREATMENTS

N/A

11.0 DATA FOR STRUCTURAL FASTENERS

Fastener data specified on the following STC drawings:

150-045011 IDU Installation

150-045050 GPS Antenna Installation

150-045051 Remote Sensors Installation

12.0 LIST OF SPECIAL TOOLS

Crimp Tools

A crimp tool and positioner/locator meeting MIL Specification M22520/1-01 or equivalent are required to ensure consistent, reliable crimp contact connections for the rear d-sub connectors. These tools are available from ITT Cannon or other vendors:

ITT Cannon
1851 E. Deere Ave.
Santa Ana, CA 92705-6500

Phone (714) 261-5300
Fax (714) 575-8324

Insertion Tool:	ITT part#274-7048-000 (Desc. CIET-22D-01)
Crimp Tool (HD):	ITT part#995-0001-584 (Desc. M22520/2-01)
Locator Tool:	ITT part#995-0001-244 (Desc. M22520/2-07)
Locator Tool (HD):	ITT part#995-0001-739 (Desc. M22520/2-06)
Locator Tool (HD):	Desc. M22520/2-09

13.0 COMMUTER CATEGORY AIRCRAFT

Electrical load must be maintained within 80% of generator capacity for systems installed (AC 43.13-1B)

14.0 RECOMMENDED OVERHAUL PERIODS

No additional overhaul time limitations.

15.0 AIRWORTHINESS LIMITATIONS

The Airworthiness Limitations section is FAA approved and specifies maintenance required under §§ 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

Structural Inspections: No structural inspections required.

28 VDC Dedicated Battery (Optional): Replace the sealed lead acid batteries in the Securaplane XL2410 Battery Unit prior to the 48th month after installation.
(Reference: Securaplane CMM 24-32-12)

12 VDC Dedicated battery (Optional): Replace the battery prior to the 36th month after installation.

16.0 REVISIONS

For the latest revision of listed documents, see Chelton Flight Systems at www.cheltonflightsystems.com . For hard copies of documents contact Chelton Flight Systems at (208) 389-9959.